Midcoast Health District (Waldo, Lincoln, Knox, Sagadahoc Counties) Burden of Injury 2005-2009

Highlights

Injury Deaths^a

- Injury was the underlying cause of death for 501 residents during this five year time period. There was an average of 100 injury deaths per year.
- The average annual injury death rate was 66.4 per 100,000 Midcoast Health District residents.
- > Injury was the underlying cause for 6.7% of all deaths among Midcoast Health District residents.
- > 70.7% of injury deaths were due to unintentional causes; 26% were due to intentional causes; 3.3% were coded as undetermined or other intent.
- The three leading causes of injury deaths were suicide, unintentional motor vehicle traffic, and unintentional poisoning.

Injury Hospital Discharges^b

- There were 4,941 hospital discharges of Midcoast Health District residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 988 such discharges per year. 5.6% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 654.8 per 100,000 Midcoast Health District residents. Midcoast Health District residents aged 65+ years were significantly more likely to have a hospital discharge than were residents in other age groups.
- The injury hospital discharge rate for females (722.5 per 100K) was higher than the rate for males (584.7 per 100K).
- > 79.7% of injury hospital discharges were known to be due to unintentional causes; 8.6% were known to be due to intentional causes; 11.7% of injury cases were coded as undetermined, other or missing intent.
- The three leading causes of injury hospital discharges were unintentional fall, unintentional motor vehicle traffic or intentional self injury.

Injury Outpatient Emergency Department Visits^c

- There were 91,325 outpatient emergency department visits for which an injury was the principal diagnosis during this 5 year period. There was an average of 18,265 visits per year. 27.6% of outpatient emergency department visits were for an injury related cause.
- The average annual injury outpatient emergency department visit rate was 12,103.6 per 100,000 residents. Teens and young adults ages 15-24 were significantly more likely to have an injury outpatient visit than were people in other age groups.
- The injury outpatient emergency department visit rate for males (13,314.0 per 100K) was significantly higher than the rate for females (10,933.6 per 100K).
- ➤ 84.1% of injury outpatient emergency department visits were known to be due to unintentional causes; 2.3% were known to be due to intentional causes; 13.6% of injury cases were coded as undetermined, other or missing intent.
- The three leading causes of injury outpatient emergency department visits were unintentional fall, unintentional struck by/against, and unintentional overexertion.

a Injury deaths defined as underlying cause of death coded as ICD-10 VO1-Y36, Y85-Y87, Y89, U01-U03, Y40-Y59, Y60-Y84, or Y88

b Hospital discharge with injury principal diagnosis defined as principal diagnosis coded as ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.5-995.59 or 995.80-995.85

c Outpatient emergency department visit with injury principal diagnosis defined as principal diagnosis coded as ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.5-995.59 or 995.80-995.85, and discharge status coded as "Discharged to home or self care (routine discharge) or "Discharged/transferred to home under care of organized home health service organization".

Five Leading Causes of Injury Deaths Midcoast Health District, 2005-2009

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Suicide 117	Unintentional Pedestrian 3	Unintentional Motor Vehicle Traffic 26	Unintentional Poisoning 36	Suicide 45	Unintentional Fall 39	Suicide 100	Unintentional Motor Vehicle Traffic 32
2	Unintentional Motor Vehicle Traffic 108	Unintentional Suffocation 3	Unintentional Poisoning 14	Suicide 34	Unintentional Motor Vehicle Traffic 26	Unintentional Unspecified 38	Unintentional Motor Vehicle Traffic 76	Unintentional Fall 26
3	Unintentional Poisoning 74	Unintentional Drowning 2	Suicide 13	Unintentional Motor Vehicle Traffic 27	Unintentional Poisoning 22	Unintentional Motor Vehicle Traffic 27	Unintentional Poisoning 55	Unintentional Unspecified 24
4	Unintentional Fall 51	Unintentional Motor Vehicle Traffic 2	Unintentional Drowning 4	Homicide 5	Unintentional Fall 11	Suicide 24	Unintentional Fall 25	Unintentional Poisoning 19
5	Unintentional Unspecified 41	Suicide 1	Homicide 3	Unintentional Drowning 3	Unintentional Transport, Other 5	Unintentional Suffocation 7	Unintentional Unspecified 17	Suicide 17

Five Leading Causes of Injury Hospitalizations Midcoast Health District, 2005-2009

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 2,424	Unintentional Fall 55	Unintentional Motor Vehicle Traffic 120	Unintentional Motor Vehicle Traffic 151	Unintentional Fall 434	Unintentional Fall 1,754	Unintentional Fall 839	Unintentional Fall 1,585
2	Unintentional Motor Vehicle Traffic 553	Unintentional Transport, Other 17	Intentional Self Injury 87	Intentional Self Injury 150	Unintentional Motor Vehicle Traffic 149	Unintentional Motor Vehicle Traffic 117	Unintentional Motor Vehicle Traffic 305	Unintentional Motor Vehicle Traffic 248
3	Intentional Self Injury 371	Unintentional Motor Vehicle Traffic 16	Unintentional Fall 43	Unintentional Fall 138	Intentional Self Injury 108	Other Adverse Effects 54	Intentional Self Injury 167	Intentional Self Injury 204
4	Unintentional Poisoning 217	Unintentional Poisoning 13	Unintentional Poisoning 33	Unintentional Poisoning 54	Unintentional Poisoning 65	Unintentional Unspecified 43	Unintentional Poisoning 121	Unintentional Poisoning 96
5	Unintentional Transport, Other 165	Unintentional Struck by/against 11	Unintentional Transport, Other 33	Unintentional Transport, Other 43	Unintentional Transport, Other 37	Unintentional Poisoning 52	Unintentional Transport, Other 106	Unintentional Transport, Other 59

Five Leading Causes of Injury Emergency Department Visits Midcoast Health District, 2005-2009

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 22,358	Unintentional Fall 5,083	Unintentional Fall 2,902	Unintentional Fall 4,436	Unintentional Fall 4,609	Unintentional Fall 5,328	Unintentional Fall 10,137	Unintentional Fall 12,220
2	Unintentional Struck by/against 10,855	Unintentional Struck by/against 3,025	Unintentional Struck by/against 2,843	Unintentional Overexertion 3,526	Unintentional Cut/pierce 2,174	Unintentional Natural/ Environmental 1,003	Unintentional Struck by/against 6,706	Unintentional Overexertion 4,795
3	Unintentional Overexertion 9,641	Unintentional Cut/pierce 1,229	Unintentional Overexertion 2,292	Unintentional Cut/pierce 2,905	Unintentional Overexertion 1,984	Unintentional Cut/pierce 828	Unintentional Cut/pierce 6,020	Unintentional Struck by/against 4,149
4	Unintentional Cut/pierce 8,888	Unintentional Natural/ Environmental 1,225	Unintentional Cut/pierce 1,752	Unintentional Struck by/against 2,645	Unintentional Struck by/against 1,596	Unintentional Struck by/against 746	Unintentional Overexertion 4,845	Unintentional Natural/ Environmental 2,813
5	Unintentional Natural/ Environmental 5,479	Unintentional Overexertion 1,136	Unintentional Motor Vehicle Traffic 1,440	Unintentional Motor Vehicle Traffic 1,584	Unintentional Natural/ Environmental 1,445	Unintentional Overexertion 703	Unintentional Other, specified 2,863	Unintentional Motor Vehicle Traffic 2,502

Maine Injury Prevention Program – Four Priority Injury Indicators Injury Deaths Midcoast Health District, 2005-2009

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Suicide 117	Unintentional Motor Vehicle Traffic 2	Unintentional Motor Vehicle Traffic 26	Unintentional Poisoning 36	Suicide 45	Unintentional Fall 39	Suicide 100	Unintentional Motor Vehicle Traffic 32
Unintentional Motor Vehicle Traffic 108	Suicide 1	Unintentional Poisoning 14	Suicide 34	Unintentional Motor Vehicle Traffic 26	Unintentional Motor Vehicle Traffic 27	Unintentional Motor Vehicle Traffic 76	Unintentional Fall 26
Unintentional Poisoning 74		Suicide 13	Unintentional Motor Vehicle Traffic 27	Unintentional Poisoning 22	Suicide 24	Unintentional Poisoning 55	Unintentional Poisoning 19
Unintentional Fall 51			Unintentional Fall 1	Unintentional Fall 11	Unintentional Poisoning 2	Unintentional Fall 25	Suicide 17

Maine Injury Prevention Program – Four Priority Injury Indicators Injury Hospitalizations Midcoast Health District, 2005-2009

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 2,424	Unintentional Fall 55	Unintentional Motor Vehicle Traffic 120	Unintentional Motor Vehicle Traffic 151	Unintentional Fall 434	Unintentional Fall 1,754	Unintentional Fall 839	Unintentional Fall 1,585
Unintentional Motor Vehicle Traffic 553	Unintentional Motor Vehicle Traffic 16	Intentional Self Injury 87	Intentional Self Injury 150	Unintentional Motor Vehicle Traffic 149	Unintentional Motor Vehicle Traffic 117	Unintentional Motor Vehicle Traffic 305	Unintentional Motor Vehicle Traffic 248
Intentional Self Injury 371	Unintentional Poisoning 13	Unintentional Fall 43	Unintentional Fall 138	Intentional Self Injury 108	Unintentional Poisoning 52	Intentional Self Injury 167	Intentional Self Injury 204
Unintentional Poisoning 217	Intentional Self Injury 10	Unintentional Poisoning 33	Unintentional Poisoning 54	Unintentional Poisoning 65	Intentional Self Injury 16	Unintentional Poisoning 121	Unintentional Poisoning 96

Maine Injury Prevention Program – Four Priority Injury Indicators Injury Emergency Department Visits Midcoast Health District, 2005-2009

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 22,358	Unintentional Fall 5,083	Unintentional Fall 2,902	Unintentional Fall 4,436	Unintentional Fall 4,609	Unintentional Fall 5,328	Unintentional Fall 10,137	Unintentional Fall 12,220
Unintentional Motor Vehicle Traffic 4,644	Unintentional Motor Vehicle Traffic 343	Unintentional Motor Vehicle Traffic 1,440	Unintentional Motor Vehicle Traffic 1,584	Unintentional Motor Vehicle Traffic 932	Unintentional Motor Vehicle Traffic 345	Unintentional Motor Vehicle Traffic 2,140	Unintentional Motor Vehicle Traffic 2,502
Unintentional Poison 630	Unintentional Poison 212	Intentional Self Injury 235	Intentional Self Injury 160	Unintentional Poison 122	Unintentional Poison 80	Unintentional Poison 326	Unintentional Poison 304
Intentional Self Injury 470	Intentional Self Injury 17	Unintentional Poison 87	Unintentional Poison 129	Intentional Self Injury 55	Intentional Self Injury 3	Intentional Self Injury 220	Intentional Self Injury 250

Data Sources

Deaths: 2005-2009 death certificate statistical datasets obtained from the Office of Data, Research and Vital Statistics, Maine analysis includes all deaths to Maine residents, regardless of the state where the death occurred.

Hospital Discharges: 2005-2009 hospital discharge (inpatient) datasets obtained from the Maine Health Data Organization. Analysis limited to discharge of Maine residents from Maine acute care hospitals (excludes psychiatric, rehabilitation and federal hospitals)

Outpatient ED Visits: 2005-2009 hospital outpatient datasets obtained from the Maine Health Data Organizations. Analysis limited to ED visits by Maine residents at Maine acute care hospitals (excludes psychiatric, rehabilitation and federal hospitals) where the person was discharged to home or self care.

Population Estimates: Annual estimates of the resident population by age, sex, race and Hispanic origin for counties: April 1, 2000 to July 1, 2009.

Injury Definitions

Unintentional Injury	Definition
Fall	When an individual sustains an injury after an unintentional descent from any height
Motor Vehicle	An incident involving a motorized vehicle and at least one injured individual, where that individual is a vehicle occupant, passenger or driver; a motorcyclist
Pedestrian	Injuries caused in transport and non-transport related crashes
Transport, Other	All transportation injuries not included in motor vehicle, pedestrian or bicycle injuries
Fire/Hot Substance	Severe exposure to flames, heat, chemicals or hot substance that leads to tissue damage of the skin or places deeper in the body; injury from smoke inhalation to the upper airway, lower airway or lungs
Firearm	Penetrating force injury resulting from a bullet or other projectile shot from a powder charged gun (handgun, shotgun, unspecified firearm)
Poisoning	Ingestion, inhalation, absorption through the skin, or injection of so much of a drug, toxin, or other chemical that a harmful effect results. This category does not include harmful effects from normal therapeutic drugs or bacterial illnesses
Suffocation	Inhalation, aspiration or ingestion of food or other object that blocks the airway or causes suffocation; intentional or accidental mechanical suffocation caused by hanging, strangulation, lack of air in a closed place, plastic bag, or falling earth. This category does not include injury resulting from a foreign body that does not block the airway.
Natural/Environmental Causes	Injury resulting from exposure to adverse natural and environmental conditions, i.e. severe heat, severe cold, lightning, sunstroke, tornadoes and natural disasters as well as lack of food or water.
Struck By/Against	Injury resulting from being struck by (i.e. hit) or crushed by a human, animal, or inanimate object or force other than a vehicle or machinery; injury caused by striking (i.e. hitting) against a human, animal or inanimate object or force other than a vehicle or machinery
Cutting/Piercing	Injury resulting from an incision, slash, perforation or puncture by a pointed or sharp instrument, weapon or object
Overexertion	Injury resulting from excessive physical exercise (i.e. lifting, pulling, pushing). Strenuous movements in recreational and other activities
Drowning	Suffocation resulting from submersion in water or other liquid
Late effects	Late effect or sequela resulting from a previous injury or poisoning

Unspecified	Information missing on mechanism (.i.e. motor vehicle, firearm, hanging) of the injury
Other	Injury associated with any other specified cause that does not fit another category
Intentional Injury	Definition
Abuse and Neglect	Injury resulting from abuse or criminal neglect
Physical Force	Injury resulting from fight, brawl, rape, includes beating with hands, fists, feet
Cutting/Piercing	Injury resulting from an incision, a slash, a perforation, or a puncture by a pointed or sharp instrument, weapon or object
Firearm	Penetrating force injury resulting from a bullet or other projectile shot from a powder charged gun (handgun, shotgun, military firearm, unspecified firearm)
Homicide	All fatal injuries purposely inflicted by other persons, excluding legal intervention by law enforcement agents
Struck	Injury resulting from striking by blunt or thrown object
Other	Injury associated with any other specified cause that does not fit another category
Self Injury	Definition
Drug and Medicinal Substances	Injury resulting from poisoning by drug and medicinal substances (i.e. analgesics, barbiturates, tranquilizers, etc)
Cutting/Piercing	Injury resulting from cutting, piercing instrument
Firearm	Penetrating force injury resulting from bullet or other projectile shot from a powder charged gun
Jump	Injury resulting from jumping from high places
Hang	Mechanical suffocation caused by hanging or strangulation or physical constriction of the neck, resulting in air loss
Suicide	All fatal injuries which are self inflicted
Other	Injury associated with any other specified cause that does not fit another category
Undetermined Intent	Definition
Poisoning	Injury resulting from poisoning by solid or liquid substance, including drugs and medicinal substances but undetermined whether unintentionally or intentionally inflicted
Unspecified	Information missing on mechanism (i.e., motor vehicle, firearm, hanging) of the injury